

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A pipe joint device, comprising:

flanges mounted to ends of pipes to be coupled together or ends of both a pipe and a pipe joint to be coupled together, the flange having at least one ring groove around an outer circumferential surface thereof;

a packing mounted to the flanges and having inner rings protruding from and integrally formed around an inner circumferential surface ~~thereof~~ of the packing to closely engage with the ring grooves of the flanges; and

a clamp having a packing seat to seat the packing therein, with a support sidewall formed by a radial inward extension of each side of the clamp, the clamp being divided into a plurality of clamp parts so that the clamp parts are placed around the packing and are fastened together by a locking member.

Claim 2 (original): The pipe joint device according to claim 1, wherein the packing comprises a main channel formed along a central line of an outer circumferential surface of the packing, and the clamp comprises a central rib formed on the packing seat to correspond to the main channel.

Claim 3 (previously presented): The pipe joint device according to claim 2, wherein the packing further comprises at least one side channel symmetrically formed around the outer circumferential surface of the packing on opposite sides of the main channel, and the clamp further comprises at least one side rib formed on the packing seat to correspond to the side channels.

Claim 4 (currently amended): The pipe joint device according to claim 1, wherein the flanges are mounted to the ends of both a pipe and a pipe joint, and the pipe joint is selected from the group consisting of a valve, a reducer, a tee and an elbow.

Claim 5 (previously presented): The pipe joint device according to claim 1, wherein the flanges are mounted through a welding process.

Claim 6 (original): The pipe joint device according to claim 1, wherein the flanges are stopped by the support sidewalls of the clamp so that the pipes or the pipe and the pipe joint are prevented from being removed from the clamp.

Claim 7 (currently amended): The pipe joint device according to claim 1, wherein each of the flanges is provided with a support groove around the outer circumferential surface thereof so that the support sidewalls of the clamp are seated in ~~the~~ ring-shaped support grooves of the flanges to prevent the pipes or the pipe and the pipe joint from being removed from the clamp.

Claim 8 (previously presented): The pipe joint device according to claim 1, wherein the packing has at least one circumferential hollow therein.

Claim 9 (currently amended): The pipe joint device according to claim 8 1, wherein the ~~circumferential hollow packing~~ comprises at least two circumferential hollows which are symmetrically formed in opposite sides of the packing.

Claim 10 (previously presented): The pipe joint device according to claim 1, further comprising:

an anti-friction member made of metal located on at least a part of the outer circumferential surface of the packing so as to reduce friction between the clamp parts and a deformed part of the packing while the clamp parts are fastened together around the packing.

Claim 11 (original): The pipe joint device according to claim 1, further comprising:
an adjusting member inserted into each of the support sidewalls of the clamp to compress the packing, placed between the support sidewalls of the clamp, in a direction of thickness of the packing.

Claim 12 (currently amended): The pipe joint device according to claim ~~1~~ 11, further comprising:

a metal ring placed between each side surface of the packing and an associated support sidewall of the clamp so as to evenly transmit compression force to each side surface of the packing when the adjusting member is tightened to compress the packing.

Claim 13 (new): A pipe joint device, comprising:
flanges mounted to ends of pipes to be coupled together or ends of both a pipe and a pipe joint to be coupled together, the flange having at least one ring groove around an outer circumferential surface thereof;

a packing mounted to the flanges and having inner rings around an inner circumferential surface thereof to closely engage with the ring grooves of the flanges; and

a clamp having a packing seat to seat the packing therein, with a support sidewall formed by a radial inward extension of each side of the clamp, the clamp being divided into a plurality of clamp parts so that the clamp parts are placed around the packing and are fastened together by a locking member,

wherein the packing comprises a main channel formed along a central line of an outer circumferential surface of the packing, and the clamp comprises a central rib formed on the packing seat to correspond to the main channel.

Claim 14 (new): The pipe joint device according to claim 13, wherein the packing further comprises at least one side channel symmetrically formed around the outer circumferential surface of the packing on opposite sides of the main channel, and the clamp further comprises at least one side rib formed on the packing seat to correspond to the side channels.

Claim 15 (new): A pipe joint device, comprising:

flanges mounted to ends of pipes to be coupled together or ends of both a pipe and a pipe joint to be coupled together, the flange having at least one ring groove around an outer circumferential surface thereof;

a packing mounted to the flanges and having inner rings around an inner circumferential surface thereof to closely engage with the ring grooves of the flanges; and

a clamp having a packing seat to seat the packing therein, with a support sidewall formed by a radial inward extension of each side of the clamp, the clamp being divided into a plurality of clamp parts so that the clamp parts are placed around the packing and are fastened together by a locking member,

wherein each of the flanges is provided with a support groove around the outer circumferential surface thereof so that the support sidewalls of the clamp are seated in ring-shaped support grooves of the flanges to prevent the pipes or the pipe and the pipe joint from being removed from the clamp.

Claim 16 (new): A pipe joint device, comprising:

flanges mounted to ends of pipes to be coupled together or ends of both a pipe and a pipe joint to be coupled together, the flange having at least one ring groove around an outer circumferential surface thereof;

a packing mounted to the flanges and having inner rings around an inner circumferential surface thereof to closely engage with the ring grooves of the flanges;

a clamp having a packing seat to seat the packing therein, with a support sidewall formed by a radial inward extension of each side of the clamp, the clamp being divided into a plurality of clamp parts so that the clamp parts are placed around the packing and are fastened together by a locking member; and

an anti-friction member made of metal located on at least a part of the outer circumferential surface of the packing so as to reduce friction between the clamp parts and a deformed part of the packing while the clamp parts are fastened together around the packing.

Claim 17 (new): A pipe joint device, comprising:

flanges mounted to ends of pipes to be coupled together or ends of both a pipe and a pipe joint to be coupled together, the flange having at least one ring groove around an outer circumferential surface thereof;

a packing mounted to the flanges and having inner rings around an inner circumferential surface thereof to closely engage with the ring grooves of the flanges;

a clamp having a packing seat to seat the packing therein, with a support sidewall formed by a radial inward extension of each side of the clamp, the clamp being divided into a plurality of clamp parts so that the clamp parts are placed around the packing and are fastened together by a locking member; and

an adjusting member inserted into each of the support sidewalls of the clamp to compress the packing, placed between the support sidewalls of the clamp, in a direction of thickness of the packing.

Claim 18 (new): The pipe joint device according to claim 17, further comprising:

a metal ring placed between each side surface of the packing and an associated support sidewall of the clamp so as to evenly transmit compression force to each side surface of the packing when the adjusting member is tightened to compress the packing.